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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,178	08/09/2000	Nathan D. Cahill	81225THC	5892

1333 7590 10/03/2005

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EXAMINER	
PERUNGAVOOR, SATHYANARAYA V	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/635,178	CAHILL ET AL.	
	Examiner	Art Unit	
	Sath V. Perungavoor	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Applicant(s) Response to Official Action

[1] The appeal brief filed on January 18, 2005 has been entered and made of record.

Response to Appeal Brief

[2] In view of the appeal brief filed on January 18, 2005, **PROSECUTION IS HEREBY REOPENED**. New grounds of for are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Bhavesh M. Mehta
SPE for Group Art Unit 2625

Claim Objections

[3] Claim 8 is objected to because of the following informalities: "Dmin" should be defined. Examiner requests the applicants define the meaning of Dmin, such as that provided in the appeal brief (i.e. Dmin is the background development of silver not imaged). Applicants need not specify a value for Dmin a simple definition would suffice. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

[4] Claims 1, 2, 4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant [Previously Cited] in view of Bilhorn et al. (hereinafter "Bilhorn") [Previously Cited] further in view of Kojima [Newly Cited, US 5,036,405].

Regarding claim 1, Bryant discloses exposing a region of the element to create a latent image which is substantially uniform across the useful imaging width of the element *[Column 3, Lines 13-28; Figure 3]*, processing the latent image to produce a density signal *[Column 3, Lines 29-46; Figure 6]*, sampling the density signal with a photometric device *[Column 3, Lines 47-54; Figures 6-8]*, and analyzing the sampled data to determine if there are regions where uniformity differs from that of the uniform exposure, if such differences are found they are linear defects *[Column 1, Lines 34-49; Column 4, Lines 9-21]*.

Bryant does not explicitly disclose analyzing the sampled density data in the widthwise direction.

However, choosing a scanning direction is a well-known methodology routinely implemented in the art depending on design choice. Nevertheless, Bilhorn teaches that it is known to analyze the sampled data in the widthwise direction to determine if there are regions where uniformity differs to locate linear defects on a photographic element *[Figure 1; Column 1, Lines 13-25; Column 2, Lines 59-67, Column 3, Lines 1-27]*.

Bryant and Bilhorn are combinable because they are from the same field of endeavor of detecting defects in film.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have modified the analysis of the sampled density data disclosed by Bryant to include analyzing the sampled data in the widthwise direction. The motivation for doing so would have been because it is well known in the art (i.e. a matter of design choice) and/or provide for the inspection of defects in a lateral direction across the width *[Bilhorn: Column 1, Lines 13-25]*.

Bryant and Bilhorn do not explicitly disclose employing the location of the defect in processing a digital image derived from the photographic element.

Kojima discloses employing the location of the defect in processing a digital image derived from the photographic element *[Column 3 Lines 30-55]*.

Bryant, Bilhorn and Kojima are combinable because they are from the same field of endeavor of detecting defects in film.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Bryant and Bilhorn with Kojima to use the defect

location in processing of digital images, the motivation being the ease of performing adjustments in digital images *[Kojima: Column 1 Lines 52-65]*. It is further noted that the combination of Bryant and Bilhorn provide an alternative defect detection method to that of Kojima. Hence, the combination of Bryant, Bilhorn and Kojima would be mere substitution of one type of defect detection method for another.

Regarding claim 2, Bryant discloses exposing a plurality of regions (Figure 3) and analyzing the sampled data in each region, whereby the likelihood of locating linear defects is enhanced *[Figure 7]*.

Regarding claim 4, Bilhorn discloses averaging of samples aligned with the length of the element, whereby the significance of a nonuniformity is enhanced *[Column 3 Line 62-Column 4 Line 1]*.

Regarding claims 10, Bryant discloses the photographic element as a film strip *[Column 2, Lines 63-66]*.

Regarding claims 11, Bryant discloses the processing step employs a standard photographic process *[Column 3, Lines 41-46]*.

[5] Claims 3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant, Bilhorn and Kojima as applied to claim 1 above, and further in view of Reem et al. (hereinafter "Reem") [Previously Cited].

Regarding claim 3, Bryant does not appear to recognize exposing a multiplicity of exposure levels varying along the length of the element. However, Reem teaches that it is known to form a multiplicity of exposure levels on a photographic element *[Column 6, Lines 23-27]*. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the exposure disclosed by Bryant, Bilhorn and Kojima to include exposing a multiplicity of exposure levels as taught by Reem because the variations alter the amount of density formed for different levels of exposure and simplifies defect detection *[Reem: Column 3, Lines 12-20]*.

Regarding claims 5-7, Bryant does not appear to recognize a specified exposure level. However, Reem teaches that it is known to expose a region of a negative photographic film having a plurality of layers to create a latent image wherein the exposure is high enough to produce a latent image that is developable in all layers of the film and the exposure is less than the exposure at which further increase in exposure no longer results in increased density *[Column 7, Lines 27-37]*, thereby being low enough to produce a latent image that upon development allows detection of any additional density due to a defect. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the exposure level disclosed by Bryant, Bilhorn and Kojima to include the exposure range taught by Reem because recognition of variations in photographic film response improves the system performance *[Reem: Column 5 Lines 15-20]*.

Regarding claim 8, the arguments analogous to those presented above for claim 7 are applicable to claim 8. While Reem does not appear to expressly state the exposure is sufficient to produce a developed image that is 1.5 above Dmin, it would have been an obvious matter of design choice to modify the exposure range disclosed by Reem to specify a particular value within the disclosed range.

[6] Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant, Bilhorn and Kojima as applied to claim 1 above, and further in view of Kobayashi et al. (hereinafter "Kobayashi") [Previously Cited].

Regarding claims 12-15, Bryant does not appear to recognize employing an alternate photographic process. However, Kobayashi teaches that it is known to process a latent image using an alternative photographic process including employing a dry photographic process using pressure sensitive heat developable film *[Column 1, Lines 22-36 and Lines 41-50]*, thereby containing thermal developable chemistry and pressure developable chemistry. Therefore, it would have been obvious to have modified the photographic process disclosed by Bryant, Bilhorn and Kojima to an alternative photographic process as taught by Kobayashi because the selection of type of photographic process is well known and would be within the level of ordinary skill in the art (i.e. a matter of design choice) at the time of the invention.

Duty of Disclosure

[7] The following is a quotation of the appropriate paragraphs of 37 CFR 1.56:

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) Prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application;

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

- Examiner respectfully requests the applicant(s) to disclose any patents and/or applications that may be material to a double patenting rejection.

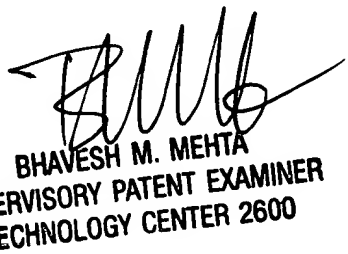
Contact Information

[8] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh M. Mehta whose telephone number is (571) 272-7453, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sath V. Perungavoor
Group Art Unit: 2625
Telephone: (571) 272-7455
Date: September 24, 2005



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